

In the Specification:

Please amend the specification as follows:

Under "*Field of the Invention*," paragraph 1, please make the following amendment:

The present invention relates to a conveyor system, and more particularly, a method and apparatus for integrating a new or transferred pallet onto a conveyor of adjacently aligned ~~end to end~~ end-to-end pallets.

Under "*Summary of the Invention*," paragraph 1, please make the following amendment:

The present invention relates to a method and apparatus for integrating a new or transferred pallet onto a conveyor system. The apparatus provides a first conveyor for carrying a plurality of pallets ~~end to end~~ end-to-end along a predetermined path of travel. A first motor is coupled to the first conveyor for driving the pallets at a first rate of speed. A first encoder is coupled to the first motor for monitoring the position of the last pallet on the first conveyor. A second conveyor is provided for introducing a new or transferred pallet to the first conveyor. A second motor is coupled to the second conveyor for driving the new or transferred pallet at a second rate of speed. A second encoder is coupled to the second motor for monitoring the position of the new pallet. A computer processor determines the relative positions of the last pallet on the first conveyor relative to the new or transferred pallet on the second conveyor. The computer processor also determines the second rate of speed in order for the new or transferred pallet to become adjacently aligned with the last pallet within a predetermined docking area. A controller adjusts the second rate of speed of the second motor in response to a signal from the computer processor.

Under "*Brief Description of the Drawings*" paragraph 1, please make the following amendment:

The description herein makes reference to the accompanying drawings wherein like reference numerals refer to like parts throughout several views, and ~~wherein~~ wherein:

Under "*Description of the Preferred Embodiment*" paragraph 9, please make the following amendment:

To prevent a gap from being created between the last skillet **16a** and the new skillet **24**, the new skillet **24** is integrated into the first conveyor **14** and will stop if it does not immediately engage a sensor **46** located at the end of the docking area **30**. When the new ~~skillet~~ skillet **24** reaches sensor **46**, as seen in Fig. 2f, the new skillet **24** should be adjacently aligned with the last skillet **16a**, and therefore, sensor **46** should be continuously actuated by the skillets **16a, 24**. If sensor **46** is not actuated by the new skillet **24**, the new skillet **24** is stopped so as to prevent the ramming or bumping of new skillet **24** into the last skillet **16a**. A backup system is provided in a sensor **48** which is located further downstream the first conveyor **14** from sensor **46**. If sensor **48** becomes exposed, a fault is generated and indicated to the user that the new skillet **24** is not properly aligned with the last skillet **16a**.

Under "*Description of the Preferred Embodiment*" paragraph 10, please make the following amendment:

Fig. 3 shows the steps of integrating the new skillet **24** onto the first conveyor **14**. In operation, the first conveyor **14** of skillets **16** progresses forward at the first rate of speed, as seen in block **50**, as assemblers assemble the workpieces **12** on the skillets **16**. The last skillet **16a** passes sensor **34** and resets the first encoder **32**, as seen in block **52**. The new skillet **24** is introduced to the

first conveyor 14 through the lift 22. When the last skillet 16a reaches sensor 36, the new skillet 24 is released from position 37, as stated in block 54. The new skillet 24 moves along the second conveyor 26 at the highest second rate of speed possible or at a predetermined upper level of the second rate of speed. When the new skillet 24 reaches sensor 34, the second encoder 40 is reset to zero, as stated in block 56. As the new skillet 24 continues to travel and reach the beginning of the docking area 30, the computer processor 42 begins to calculate the second rate of speed of the new skillet 24 required for the new skillet 24 to become adjacently aligned with the last skillet 16a within the docking area 30. As seen in decision block 58, the computer processor 42 first determines whether the last skillet 16a and the new skillet 24 are within the docking area 30. This is determined by subtracting the position of the last skillet 16a from the position of the new skillet 24. If the difference is greater than the docking area 30, then the computer processor 42 continues to monitor the position of the skillets 16a, 24 until the skillets 16a, 24 are within the docking area 30. Once the skillets 16a, 24 are within the docking area 30, then the ramp can be calculated, as seen in block 60. The computer processor 42 utilizes the relative positions of the last skillet 16a and the new skillet 24 along with the first rate of speed of the last skillet 16a to determine the deceleration of the second rate of speed of the new skillet 24, as seen in block 62. The computer processor 42 provides a signal to the controller 14 which adjusts the variable drive 20 drive 28 of the second conveyor 26, as seen in block 64. The speed of the new skillet 24 is continually reduced until the new skillet 24 becomes adjacently aligned with the last skillet 16a whereby the new skillet 24 will assume the same rate of speed as the last skillet 16a, as seen in block 66. The new skillet 24 is then integrated into the first conveyor 14, and the process is repeated by having yet another new skillet skillet 24 introduced onto the second conveyor 26, as seen in block 68.